

# The European Green Deal and the energy sector - 7 July 2021

*An Irish perspective*



# Green Deal: Irish electricity market perspective - context

- ▶ The European Green Deal Communication, COM(2019) 640 final states that *“A power sector must be developed that is based largely on renewable sources, complemented by the rapid phasing out of coal and decarbonising gas. At the same time, the EU's energy supply needs to be secure and affordable for consumers and businesses”* (section 2.1.2 ‘supplying clean, affordable and secure energy’)
- ▶ Securing electricity supply while moving to a RES dominated market all in an affordable manner is a huge challenge for any electricity market and system. **So how can law, policy and/ or regulation facilitate an affordable secure decarbonisation transition in the electricity market?**
- ▶ The Green Deal COM recognises that *“New measures on their own will not be enough to achieve the European Green Deal’s objectives. In addition to launching new initiatives, the Commission will work with the Member States to step up the EU’s efforts to ensure that current legislation and policies relevant to the Green Deal are enforced and effectively implemented.”* (s.2.1)
- ▶ The interpretation and application of existing as well as developing EU and national laws and policies will have a big impact on how affordable increasing renewables in the electricity market, while keeping the lights on, will be...

# The huge cost to pay renewables not to generate is a big issue

## ► Article 12 Regulation (EU) 2019/943 on the internal market for electricity (recast)

- Art. 12(1): *“The dispatching of power-generating facilities and demand response shall be non-discriminatory, transparent and, unless otherwise provided under paragraphs 2 to 6, market based”.*

Renewables must be integrated into the market on a level playing field with non-renewable units.

- Art. 12(6): *“...power-generating facilities that use renewable energy sources or high-efficiency cogeneration and were commissioned before 4 July 2019 and, when commissioned, were subject to priority dispatch ...shall continue to benefit from priority dispatch...”*

In effect, new units from 4 July 2019 have no priority dispatch status for MW output (\*certain exceptions apply).

## ► Article 13 Regulation (EU) 2019/943 on the internal market for electricity (recast)

- Art. 13: (1) *“The redispatching of generation and redispatching of demand response shall be based on objective, transparent and non-discriminatory criteria...”* (2) *“...using market-based mechanisms...”*
- Art. 13(7): *“Where non-market based redispatching is used, it shall be subject to financial compensation by the system operator requesting the redispatching... [where there is a firm grid connection]...”*. The financial compensation can in some instances be up to the day-ahead market price.

## ► Conclusion

- An interpretation of Article 13 of the Clean Energy’s Package’s electricity regulation that takes into account the overall aim of integrating renewables into the electricity market on a level playing field with non-renewable units, as reflected in Article 12, could save the Irish consumer hundreds of millions in the cost of paying renewables not to generate.

# The volume of subsidy-free renewables must increase

- ▶ New Irish renewables (RES) support scheme could double the cost to consumers of subsidising renewables to c. €800m by 2030 vs. today (subject to day-ahead price movements)
- ▶ Costs could be reduced by levelling the playing field between subsidised and subsidy-free renewables
- ▶ Irish Climate Action Plan 2019 - target for corporate RES PPAs to meet 15% electricity demand by 2030
- ▶ Possible concerns:
  - Potential revision of **Renewable Energy Directive (EU) 2018/2001 (RED II) article 19** under Fit for 55 package - guarantees of origin for all including subsidised renewables? Will not help level playing field with subsidy free renewables or help reduce consumer costs
  - Ongoing **State Aid Guidelines consultation, section 4.11** - reducing levies on large consumers for renewable supports? Will not help minimise costs for *all* consumers
- ▶ Baringa 2020, suggested policy measures: E.g. reduce frequency of renewable auctions, cap % of a project's capacity eligible for a subsidy, expose renewable price to market prices, cap supports...

## ▶ Conclusion

- To reduce the cost of RES investments we need to see more RES investments through subsidy free PPAs (corporate RES PPAs) which would reduce the cost of subsidised RES. Policy levers should be applied to help level the playing field between subsidised and subsidy-free renewables. The revised RED II directive and draft State Aid guideline provisions if adopted in, and applied by, member states could undermine increased uptake of subsidy free PPAs by corporates.

# The lights must also stay on...

- ▶ Irish government target: 70% of electricity demand to be met from renewables by 2030
- ▶ 2020 MAREI, EAI report: *“The [2030] system has a similar level of gas capacity to today’s system (circa 5.2GW), but these generators will operate at reduced levels...”*
- ▶ Balance needed between attracting new investment in gas capacity, minimising lock-in to natural gas and keeping costs down for consumers. How?
  - Capacity auctions - prices need to finance short term returns to avoid lock-in to natural gas however
  - Carbon capture and storage (CCS) - EU Innovation Fund €10bn, CCS capex and opex in scope
  - Hydrogen, ‘green’ and ‘low carbon’ - EU Parliament resolution 19 May 2021 that ‘low carbon’ includes ‘blue’ is an important political signal. RED II revised definition of ‘low carbon’ awaited... potential for hydrogen supports?
- ▶ Irish government initial policies on CCS and hydrogen not expected until Q4 2022 however
- ▶ Conclusion
  - While EU legal and policy intentions around supporting CCS and hydrogen provide potential avenues for lower cost investment in synchronous dispatchable generation like CCGTs and OCGTs, individual member states like Ireland need to urgently take a clear position on their own policy and expectations for CCS and hydrogen if cost-effective investments in generation needed to help security of electricity supply in a high renewables electricity market are to materialise

# Affordability must also apply from the ground up

- ▶ Enabling decarbonised electricity while ensuring security of electricity supply in an affordable manner can be considerably influenced by *local grid connection policy*.
- ▶ To meet Ireland's 2030 renewables target of 70% RES-E, grid development could cost ~€2bn if the current approach around connection to the grid of new capacity continues or €0.5-0.7bn (*EirGrid, 2021*) if the current grid is optimised and the location of new connections influenced by levels of generation and demand in particular areas of the grid.
- ▶ If strong signals are provided on the cost of connecting to grid in a particular area based on the capacity for more grid connection before investment decisions are made, this can make optimum cost-effective use of an electricity grid as small as Ireland's where we have up to ~5.5GW daily demand.
- ▶ **Conclusion**
  - Ideally Irish electricity grid connection policy needs to evolve such that signals exist that will see generation locate where most demand is needed, and demand locate in areas where most generation is available. This should minimise costs for consumers - grid development costs and the cost of paying electricity units not to generate due to grid congestion for example.